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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/674,399	KIM, MYOUNG-HO	
	Examiner	Art Unit	
	Greg F. Cunningham	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8,12 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12 and 13* is/are allowed.

6)☒ Claim(s) *2-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications of application received 8/20/2007.

2. The disposition of the claims is as follows: claims 2 – 8, 12 and 13 are pending in the application. Claims 2, 4, 5, 8, 12 and 13 are independent claims. Claims 1 and 9- - 11 have been cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boger (US 6,724,351 B1), and further in view of Czako (US 6,313,850 B1).

A. Boger discloses claim 2, "A method of controlling a video control system in a computer having a video controller [col. 2, lns. 49-54] for supplying a picture signal to a displaying apparatus [col. 2, lns. 12-28], the displaying apparatus comprising selectable display settings to individually control at least one of a brightness, color, and contrast, with the video controller controlling the displaying apparatus by supplying the picture signal based upon at least one pre-assigned display adjusting value to adjust at least one display setting, corresponding to at least one display setting of the displaying apparatus, within the video controller to control the picture signal provided to the displaying apparatus, the method comprising:

selecting a conversion of a current display setting within the video controller for the picture signal upon a user selection regarding operation of the computer [col. 2; ln. 64 – col. 3, ln. 4, wherein user selects mode 1 or mode 2; and col. 7, lns. 5-20];

adjusting the picture signal based on the pre-assigned display adjusting value and the selecting of the conversion ; and

outputting the adjusted picture signal to the displaying apparatus from the video controller [col. 2, ln. 64 – col. 3, ln. 4; col. 5, ln. 54 – col. 6, ln. 16; and col. 8, lns. 31-43]" [as detailed].

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Boger further discloses claim 2, "wherein pre-assigning of pre-assigned display adjusting value comprises assigning a value for adjusting any one of brightness, color, contrast, and gamma of a moving picture signal provided to the displaying apparatus" supra for claim 1; wherein Czako: 'color/contrast values' correspond to "any one of brightness, color, contrast, and gamma".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system

which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

B. Boger discloses claim 4, "A method of controlling a video control system in a computer having a video controller [col. 2, lns. 49-54] for supplying a picture signal to a displaying apparatus [col. 2, lns. 12-28] and a video driver controlling the video controller, the displaying apparatus comprising selectable display settings to individually control at least one of a brightness, color, and contrast, with the video controller controlling the displaying apparatus by supplying the picture signal based upon at least one pre-assigned display adjusting value to adjust at least one display setting, corresponding to at least one display setting of the displaying apparatus, within the video controller to control the picture signal provided to the displaying apparatus, the method comprising:

hooking a user input signal transmitted to an operating system of the computer [Boger: col. 9, ln. 47 – col. 10, ln. 8, corresponding with 'sets of instructions' and/or 'applets'];

ascertaining whether the input signal is a moving picture;

supplying the pre-assigned display adjusting value to the video driver if conversion of a corresponding picture displaying status is selected based on the ascertaining operation;

adjusting within the video driver the input signal to be supplied to the video controller based on the supplied pre-assigned display adjusting value; and

outputting the adjusted input signal to the displaying apparatus from the video controller [Boger: col. 2, ln. 64 – col. 3, ln. 4; col. 5, ln. 54 – col. 6, ln. 16; and col. 8, lns. 31-43], wherein the pre-assigned display adjusting value is set at an application level of the computer operating system"

Although Boger does not appear to disclose portion of the above elements, for example, supplying the pre-assigned display adjusting value to the video driver if conversion of a corresponding picture displaying status is selected based on the ascertaining operation; and adjusting within the video driver the input signal to be supplied to the video controller based on the supplied pre-assigned display adjusting value' Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

While Boger does not specifically state supplying the display adjusting value to the video driver, Boger does disclose that the control information operable to control the display, and circuitry for receiving control information from the personal computer via display cable 214 (e.g., via an operating system extension, standard PC utility, display-specific utility, and so forth). Furthermore, Boger employs a video controller and software application operating as part of an extension of an operating system, it is well known and inherent that the various hardware components of a computer system employ and use software drivers, for example a video controller inherently employs a video software driver. Therefore when control information is supplied to Boger's apparatus for changing the mode of a display apparatus, it must inherently

also be asserted through the video driver, since it is well known and inherent that a video driver acts as the interface between a video controller and a video display.

Furthermore (a) value set up in advance; and (b) use of a video driver; the former is obvious since the automatic adjustment of a proper quality of picture and having set data of contrast and luminance corresponding to the ID code stored therein separately corresponds to "supplying the display adjusting value set up in advance". As to the former "video driver", Boger has disclosed this as obvious as revealed supra for claims 1-3.

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

C. Boger discloses claim 5, "A system for video control in a computer having a video controller [col. 2, lns. 49-54] for supplying a picture signal to a displaying apparatus [col. 2, lns. 12-28], the displaying apparatus comprising selectable display settings to individually control at least one of a brightness, color, and contrast, with the video controller controlling the displaying apparatus by supplying the picture signal based upon at least one pre-assigned display adjusting

value to adjust at least one display setting, corresponding to at least one display setting of the displaying apparatus, within the video controller to control the picture signal provided to the displaying apparatus, the system comprising:

a display adjusting input part allowing assignment of the pre-assigned display adjusting value adjusting a displaying status of a picture displayed on the displaying apparatus [Boger: col. 4, ln. 59 – col. 5, ln. 8; wherein 'standard interlaced television signal' and 'noninterlaced or progressively scanned output' correspond to "display adjusting input part allowing input of a display adjusting value adjusting a displaying status of a picture displayed on the displaying apparatus; col. 2, lns. 11-27, wherein television (interlaced) mode optimizes TV signal for overscanning, increased brightness, color temperature, and so forth, while computer graphics (noninterlaced) mode does so for underscanned, generally less bright and more sharply focused than TV mode corresponds to "display adjusting input part allowing input of a display adjusting value adjusting a displaying status of a picture displayed on the displaying apparatus"; col. 6, lns. 4-16 wherein 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures. The control information may be input by one or more of user-accessible manual controls (e.g., a push-button control panel), a remote control unit (e.g., IR, RF, cabled, and so forth) operable to control the display, and circuitry for receiving control information from the personal computer via display cable 214 (e.g., via an operating system extension, standard PC utility, display-specific utility, and so forth).'];

a picture adjusting value storage to store the pre-assigned display adjusting value [corresponds with col. 5, ln. 54 – col. 6, ln. 16, wherein 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.' Microprocessors and/or microcontrollers inherently employ memory in the form of RAM, ROM, PROM EEPROM, VRAM, SGRAM, (see col. 3, ln. 48 – col. 4, ln. 58 for memory types and connections) and internal registers to store and operate on all digital input/output information data. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use microprocessors and/or microcontrollers disclosed by Boger in conjunction with memory for "storing input display adjusting value".];

a displaying status conversion part selecting a conversion of the displaying status of the picture displayed on the displaying apparatus according to a user selection [col. 2, ln. 64 – col. 3, ln. 4, wherein user selects mode 1 or mode 2; col. 6, lns. 4-8 at 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.'; and col. 7, lns. 5-20; and wherein "displaying status" is interpreted from specification at "when changing the display settings by the OSD, a brightness value, a contrast value, and so on, respectively need to be increased or otherwise decreased to set an adequate displaying status of the picture" such that changing a brightness value, a contrast value, and so on, corresponds with "a displaying status conversion" as exemplified by Boger supra.]; and

a controller [col. 6, lns. 4-8 at 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.'] controlling the video controller [col. 2, lns. 49-67; col. 5, ln. 54 – col. 6, ln. 16; see video controller] and changing a picture signal to be output from the video controller based on the pre-assigned display adjusting value [Boger: col. 5, ln. 54 – col. 6, ln. 16], in response to the selected displaying status conversion [col. 2, ln. 55 – col. 3, ln. 4; col. 7, lns. 21-34];

wherein the picture corresponding to the selected displaying status conversion comprises a moving picture" [as detailed].

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

D. Boger discloses claim 6, "The system according to claim 5, wherein the pre-assigned display adjusting value [Boger: col. 6, lns. 1-16 <see brightness, contrast, vertical and horizontal

sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.>; and col. 2, lns. 42-48] is for adjusting the moving picture [Boger: interlaced mode; and col. 1, lns. 48-58, wherein brightness and color temperature are preset according to "TV mode" or "computer graphics mode"]; and

the controller changes the picture signal [col. 6, lns. 4-16 wherein 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.'] to be output from the video controller [col. 2, lns. 49-54] according to the pre-assigned display adjusting value [corresponds with col. 5, ln. 54 – col. 6, ln. 16, wherein 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.' Microprocessors and/or microcontrollers inherently employ memory in the form of RAM, ROM, PROM EEPROM, VRAM, SGRAM, (see col. 3, ln. 48 – col. 4, ln. 58 for memory types and connections) and internal registers to store and operate on all digital input/output information data. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use microprocessors and/or microcontrollers disclosed by Boger in conjunction with memory for "storing input display adjusting value".] supra for claim 5 and [as detailed].

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

E. Boger discloses claim 8, "A computer video control system with a video controller for supplying a picture signal to a display apparatus, the displaying apparatus comprising selectable display settings to individually control at least one of a brightness, color, and contrast, with the video controller controlling the displaying apparatus by supplying the picture signal based upon at least one pre-assigned display adjusting value to adjust at least one display setting, corresponding to at least one display setting of the displaying apparatus, within the video controller to control the picture signal provided to the displaying apparatus, the computer video control system comprising:

a programmed computer processor storing the pre-assigned display adjusting value input by a user to convert a displaying status of a moving picture displayed on the displaying apparatus [Boger: col. 4, ln. 59 – col. 5, ln. 8; wherein 'standard interlaced television signal' and 'noninterlaced or progressively scanned output' correspond to "display adjusting value to convert a displaying status of a moving picture displayed on a monitor"; col. 2, lns. 11-27, wherein television (interlaced) mode optimizes TV signal for overscanning, increased brightness, color temperature, and so forth, while computer graphics (noninterlaced) mode does so for

underscanned, generally less bright and more sharply focused than TV mode; col. 6, lns. 4-16 wherein 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures. The control information may be input by one or more of user-accessible manual controls (e.g., a push-button control panel), a remote control unit (e.g., IR, RF, cabled, and so forth) operable to control the display, and circuitry for receiving control information from the personal computer via display cable 214 (e.g., via an operating system extension, standard PC utility, display-specific utility, and so forth).'], selecting the displaying status [col. 2, ln. 64 – col. 3, ln. 4, wherein user selects mode 1 or mode 2; col. 6, lns. 4-8 at 'Display 114 further comprises a microprocessor or microcontroller 218 to provide standard digital monitor controls to control, for example, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution, color temperatures.'; and col. 7, lns. 5-20; and wherein "displaying status" is interpreted from specification at "when changing the display settings by the OSD, a brightness value, a contrast value, and so on, respectively need to be increased or otherwise decreased to set an adequate displaying status of the picture" such that changing a brightness value, a contrast value, and so on, corresponds with "a displaying status conversion" as exemplified by Boger supra.] according to a job processing [Boger: col. 6, ln. 61 – col. 7, ln. 4, corresponding with 'FIG. 3 shows a block diagram of a preferred video display control system according to the present invention. The present invention may be implemented in software 302 which may be tangibly embodied on a medium readable by a computer and capable of causing the computer to execute the method according to the present invention. Software 302 may be

implemented as a part of or as an extension of an operating system or software application environment, such as an audiovisual control panel or the like, for example, of the type including controls for selection and playback of A/V sources and other A/V features.', wherein 'a software application' corresponds to "job"], and changing a moving picture signal output to the pre-assigned displaying apparatus in response to the displaying status selection and based on the pre-assigned display adjusting value [Boger: col. 5, ln. 54 – col. 6, ln. 16];

wherein the pre-assigned display adjusting value relates to a moving picture mode" [as detailed].

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boger and Czako, as applied to claim 2 above, and further in view of Iwaki (US 6,567,097 B1).

A. Boger and Czako disclose claim 3, "The method according to claim 2, further comprising:

selecting a picture conversion automatic execution to allow a displaying status of the picture signal to be automatically converted by the video controller if the moving picture is determined to be displayed on the displaying apparatus;

determining whether the moving picture is to be displayed on the displaying apparatus;

automatically adjusting the signal of the moving picture signal supplied from the video controller to the displaying apparatus according to the pre-assigned display adjusting value if it is determined that the moving picture is to be displayed on the displaying apparatus" supra for claim 2 and [as detailed].

However Boger and Czako do not appear to disclose, "selecting a picture conversion automatic execution to allow a displaying status of the picture signal to be automatically converted by the video controller if the moving picture is determined to be displayed on the displaying apparatus [Iwaki: col. 10, ln. 54 – col. 11, ln. 15 wherein 'mode switching among different sources can also be automatically done' corresponds to "automatic execution"];

determining whether the moving picture is to be displayed on the displaying apparatus [corresponds with Iwaki: col. 9, 30-35; and col. 11, lns. 4-8, wherein 'the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data, corresponding parameters are set in registers of the graphics controller 105 by hardware'];

automatically adjusting the signal of the moving picture signal supplied from the video controller to the displaying apparatus according to the pre-assigned display adjusting value [corresponds with Iwaki: col. 2, lns. 12-21; and col. 10, ln. 54 – col. 11, ln. 15, for 'video mode setup in the interlaced display mode by setting parameters in registers of the graphics controller'], if it is determined that the moving picture is to be displayed on the displaying apparatus [corresponds with Iwaki: col. 11, lns. 4-8, wherein 'the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data, corresponding parameters are set in registers of the graphics controller 105 by hardware']", but Iwaki does [as detailed].

Iwaki's disclosure in col. 11, lns. 4-8, of 'That is, the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data, corresponding parameters are set in registers of the graphics controller 105 by hardware' meets the condition of "ascertaining whether the moving picture is displayed on the displaying apparatus" and also the "conditional if" via 'checks if interlaced video data is input, and upon detection ...' and furthermore Iwaki in col. 9, lns. 30-35 discloses 'when interlaced video data is displayed on the CRT, the CRT is automatically switched from the noninterlaced display mode to the interlaced display mode to directly output the video data as interlaced data to the CRT and to interlaced-display the video data.'

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply mode selection with associated brightness and color temperature setting disclosed by Boger and Czako in combination with check for interlaced video and upon detection switch modes disclosed by Iawki, and motivated to combine the teachings because

'when such data are displayed on a display monitor of a computer, the interlaced display data output from the DVD decoder must be converted into noninterlaced display data. The interlace to noninterlace conversion is done by a display controller that controls the display monitor' as revealed in col. 1, lns 32-36.

B. Boger and Czako disclose claim 7, "The system according to claim 5, further comprising an automatic execution selector automatically converting the displaying status if the a moving picture is displayed on the displaying apparatus [Iwaki: col. 9, lns. 31-35, corresponding with 'when interlaced video data is displayed on the CRT, the CRT is automatically switched from the noninterlaced display mode to the interlaced display mode to directly output the video data as interlaced data to the CRT and to interlaced-display the video data'; and col. 10, ln. 54 – col. 11, ln. 15 wherein 'mode switching among different sources can also be automatically done' corresponds to "automatic execution"];

wherein the controller changes the moving picture signal to be output from the video controller according to the stored display adjusting value [corresponds with Iwaki: col. 2, lns. 12-21; and col. 10, ln. 54 – col. 11, ln. 15, for 'video mode setup in the interlaced display mode by setting parameters in registers of the graphics controller'], if sensed that the moving picture is displayed on the displaying apparatus [corresponds with Iwaki: col. 11, lns. 4-8, wherein 'the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data, corresponding parameters are set in registers of the graphics controller 105 by hardware']" supra for claim 5 and [as detailed].

Iwaki's disclosure in col. 11, lns. 4-8, of 'That is, the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data,

corresponding parameters are set in registers of the graphics controller 105 by hardware' meets the condition of "ascertaining whether the moving picture is displayed on the displaying apparatus" and also the "conditional if" via 'checks if interlaced video data is input, and upon detection ...' and furthermore Iwaki in col. 9, lns. 30-35 discloses 'when interlaced video data is displayed on the CRT, the CRT is automatically switched from the noninterlaced display mode to the interlaced display mode to directly output the video data as interlaced data to the CRT and to interlaced-display the video data.'

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply mode selection with associated brightness and color temperature setting disclosed by Boger in combination check for interlaced video and upon detection switch modes disclosed by Iawki, and motivated to combine the teachings because 'when such data are displayed on a display monitor of a computer, the interlaced display data output from the DVD decoder must be converted into noninterlaced display data. The interlace to noninterlace conversion is done by a display controller that controls the display monitor' as revealed by Iawki in col. 1, lns 32-36.

Although Boger does not appear to disclose portion of the above elements, for example, pre-assigned display adjusting value, Czako does in col. 9, lns. 50-64; col. 10, ln. 65 – col. 11, ln. 10 and col. 12, lns. 10-16.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to set up in advance a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, in combination with loaded color/contrast values and user scroll disclosed by

Czako, and motivated to combine the teachings because it would provide a system which permits the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako in col. 4, lines 23-25.

Allowable Subject Matter

6. Claims 12 and 13 are allowed.

A. The following is a statement of reasons for the indication of allowable subject matter:

Claims 12 and 13 recite subject matter not found among the prior art of record, for example, in claim 13 wherein the image signal adjusting comprises performing an 'AND' operation on data stored in a display memory and a mask table representing the pre-assigned display adjusting value, and multiplying a result of the 'AND' operation by a gain value of the image signal; or in claim 13 wherein the image is a moving image and the image signal adjusting comprises performing an 'AND' operation on data stored in a frame buffer of the moving image signal and gain value of the image signal, in addition to the comprising claim elements as compared with a TV mode and a computer graphics mode with their associated overscanning or underscanning, brightness, color temperature, and so forth settings as disclosed by Boger supra, or with loaded color/contrast values and user scroll disclosed by Czako, or with the modification of the color and contrast values associated with only a portion of the pixels assigned a given subpicture type as revealed by Czako. Therefore claims 12 and 13 are allowed.

Response to Arguments

7. Substance of the first Office Action, mail date 4/19/2007, used in the final rejection is incorporated herein by reference.

Applicant's arguments filed 7/18/2007 have been fully considered but they are not persuasive. The Applicant(s) detail Boger (US 6,724,351 B1) in review, but only mentions the name of Czako (US 6,313,850 B1). Exerts cited from Czako reveal DVD video use for playing interactive movies [col. 1, lns. 14-19 and ln. 53 – col. 2, ln. 2].

Furthermore Czako reveals "outputting the adjusted picture signal to the displaying apparatus from the video controller, wherein a pre-assigning of pre-assigned display adjusting value comprises assigning a value for adjusting any one of a brightness, color, contrast, and gamma of a moving picture signal provided to the displaying apparatus" at col. 9, lns. 50-64, 'In operation, four-byte color/contrast values are loaded into locations 326 to correspond to DVD pixel values which correspond to color palette addresses 324. Typically, the color palette 322 is loaded by a display processor through a bus, such as bus 130 in FIG. 1. In this manner, although only four color/contrast values are associated with the subpicture pixel value at a given time, those four values are chosen from 2.sup.24 possible colors and 16 possible contrast values. The bit map 312 and color palette 322 are typically located within a video controller such as video controller 165 of FIG. 1. Should a user scroll to one of the option locations displayed on the screen 300, the highlight object 213 may be used to change the appearance of the display, accenting a button for example, to thereby indicate to a user which of the displayed options he has chosen.'

See also col. 10, ln. 65 – col. 11, ln. 10; col. 12, lns. 10-16; and col. 13, lns. 6-12.

With regard to claim 3, it should be noted that Iwaki (US 6,567,097 B1), discloses in col. 1, lns. 8-13 that 'present invention relates to a display control apparatus and interlaced data display control method and, more particularly, to a display control apparatus for displaying interlaced display image data such as a moving image on a display device used as a display monitor for a computer, and an interlaced data display control method.' See also Iwaki at col. 1, ln. 55 and col. 2, ln. 4 'moving image'. Thus Iwaki's 'interlaced data' corresponds to "moving image (picture)", whereby 'For example, such automatic switching is implemented as follows. That is, the interlaced data bypass circuit 501 or the like checks if interlaced video data is input, and upon detection of interlaced video data, corresponding parameters are set in registers of the graphics controller 105 by hardware.' – col. 11, lns. 1-8.

With regard to claim 4, Czako discloses whether the input signal is a moving picture 'interlaced image' data (see claim 3 supra).

Claim 5-7, do not depend from claim 4 and are rejected as detailed supra.

With regard to claim 8, it is rejected for reasons similar to claims 1, 4 and 5.

Responses

8. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Inquiries

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on (571) 272-7778. The Central FAX Number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G. F. Cunningham

Gregory F. Cunningham
Examiner, Art Unit 2624

gfc

9/24/2007

Matthew C. Bella

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